

## AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

Serial Number: 09/475,220

Filing Date: December 30, 1999

Title: METHOD AND APPARATUS FOR COMMUNICATING STATE INFORMATION USING VERTICAL BLANKING INTERVAL

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**REMARKS**

Claims 6, 16 and 23 are canceled by this Amendment. As a result, claims 1-5, 7-15, 17-22 and 24 are now pending in the application. The present Amendment incorporates features of dependent claims 6, 16 and 23 into independent claims 1, 15 and 20, respectively. Similar features are incorporated into independent claim 11.

The Office Action includes a rejection of claims 1-24 under 35 U.S.C. §102(e) in view of U.S. Patent 6,407,779 ("Herz"), and an indication that the patents cited in the Information Disclosure Statement dated December 30, 1999 have been considered. There are no objections to the drawings.

The §102 rejection in view of the Herz patent is respectfully traversed.

The present invention is drawn to systems and methods involving control signals of an information processing system and a signal processing device. Examples of such information processing systems include television tuners, videocassette recorders (VCRs), video laser disc players, digital versatile disk (DVD) players, and the like. In accordance with the invention, the signal processing device receives and processes the control signal, and encodes data onto an output signal provided to the information handling system. The data is encoded onto a vertical blanking interval of the output signal. The patent relied upon in the Office Action—the Herz patent—does not disclose these features.

The Herz patent involves a universal remote control system with a plethora of features, including: bidirectional communications to and from the remote control, dual communication mode, automatic communication mode selection, loading an electronic program guide (EPG) into the remote control, and so on. The Herz patent mentions that cable companies can update the EPG programming by periodically sending EPG information through the cable lines to users' television sets. In particular, Herz states that, "[s]pecifically, this information can be embedded in the vertical blanking interval ("VBI") portion or MPEG sub-picture data portion of the television signal. However, the Herz patent does not anticipate encoding any data associated with the control signal into the VBI. Consequently, the Herz patent does not disclose that "the data is encoded onto a vertical blanking interval of the output signal," as recited in claim 1 and in

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claim 11, or that "the data is encoded onto an available vertical blanking interval of the output signal," as recited in claim 15 and in claim 20.

Accordingly, the Herz patent does not disclose features of the present invention. Therefore, withdrawal of the rejection is respectfully requested.

Conclusion

The pending claims are respectfully submitted to be in condition for allowance. Accordingly, notification to that effect is earnestly requested. In the event that issues arise in the application which may readily be resolved via telephone, the Examiner is kindly invited to telephone the Gateway, Inc. attorney at (605)232-1967 to facilitate prosecution of the application.

It is believed that no fee is owed for the present Amendment. However, if necessary, please charge any additional fees or credit overpayment to Deposit Account No. 50-0439.

Respectfully submitted,

Date: November 26, 2002

By



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**APPENDIX****MARKED-UP VERSION OF AMENDED CLAIMS**

1. (Once Amended) A system, comprising:

a signal processor for receiving a signal to be processed; and

an information handling system for receiving an output signal provided by said signal processor, the output signal being representative of at least a portion of the input signal, wherein said information handling system provides a control signal to said signal processor and said signal processor encodes data onto the output signal in response to the control signal such that the encoded data is decodable by said information handling system;

wherein the output signal provided by said signal processor is a video signal, and the data is encoded onto a vertical blanking interval of the output signal.

7. (Once Amended) A system as claimed in claim 1, the output signal provided by said signal processor being an NTSC compliant video signal [, the data being encoded onto a vertical blanking interval of the NTSC compliant video signal].

8. (Once Amended) A system as claimed in claim 1, the output signal provided by said signal processor being an NTSC compliant video signal, the data being encoded onto [a] the vertical blanking interval of the NTSC compliant video signal in compliance with an Electronic Industry Association standard.

11. (Once Amended) A system, comprising:

means for processing a received signal;

means for transmitting a control signal to said processing means;

means, coupled with said processing means for receiving and decoding the control signal;

means, coupled with said processing means, for receiving and decoding the control signal;

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means, coupled with said processing means, for encoding data onto an output signal provided by said processing means in response to the control signal; and  
means for transmitting the output signal to said transmitting means wherein said transmitting means is capable of decoding the encoded data from the provided signal;  
wherein said data is encoded onto a vertical blanking interval of the output signal.

## 15. (Once Amended) A method, comprising:

transmitting a control signal to a signal processor from an information handling system that controls the signal processor;  
receiving and decoding the control signal;  
providing an output signal from the signal processor to the information handling system; and  
encoding data onto the provided output signal in response to the control signal;  
wherein the output signal provided by said signal processor is a video signal, and the data is encoded onto an available vertical blanking interval of the output signal.

19. (Once Amended) A method as claimed in claim 15, further comprising the steps of:  
[encoding the data in an available vertical blanking interval of the output signal, and, in the event a]

determining that the available vertical blanking interval is not available[,] during a predetermined time after decoding the control signal; and  
interleaving the data in a previously existing data packet.

20. (Once Amended) A program of instructions storable on a computer readable medium for causing an information handling system to execute a series of steps, the steps comprising:

transmitting a control signal from an information handling system to a signal processor that the information handling system controls;  
receiving and decoding the control signal;

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providing an output signal from the signal processor to the information handling system;  
and  
encoding data onto the output signal in response to the control signal;  
wherein the output signal provided by said signal processor is a video signal, and the data is encoded onto an available vertical blanking interval of the output signal.

24. (Once Amended) A program of instructions as claimed in claim 20, the steps further comprising the steps of: [encoding the data in an available vertical blanking interval of the output signal, and, in the event a]

determining that the available vertical blanking interval is not available [,] during a predetermined time after decoding the control signal; and  
interleaving the data in a previously existing data packet.

Claims 6, 16 and 23 (canceled).